ARI Newsletter

U.S. Army Research Institute for the Behavioral and Social Sciences

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Toward a Simulation-Focused Training System for U.S. Army Aviation

Traditional Training in a World of High-Technology Simulation

The 21st Century will likely see an expansion in the use of simulation in aviation training. Simulation technology is evolving so rapidly that even experts have difficulty keeping abreast of it. Yet, as of this writing, for Initial Entry Rotary Wing (IERW) training, U.S. Army Aviation employs simulation only for the instrument phase. The Synthetic Flight Training System (SFTS) is the instrument simulator currently being used. It is an older-generation non-visual simulator, which is complex and expensive to operate and maintain. The ARI Rotary Wing Aviation Research Unit (RWARU) at Fort Rucker, Alabama, has recently demonstrated how pretraining in a low-cost TH-67 simulator can save training time in the aircraft. RWARU is currently involved in a research project to demonstrate that this low-cost simulator can also train student pilots in the instrument phase of IERW. This and other ARI research does not suggest that the optimal use of simulation entails simply substituting aircraft hours for simulator hours. The way in which U.S. Army Aviation trains will also have to change, and therein lies the challenge for ARI.

Lock-Step Flight Training Programs

Most military primary flight training programs of instruction (POIs), including those employed by the Army, use the concept of the flight

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From the Director

Applied research supports decision-making. Good applied research recognizes that physical truth may be poorly or incompletely known. Its objective is to evaluate, to order, to structure incomplete knowledge, and to demonstrate processes and findings to support decisions. Good applied research allows decisions to be made with as complete an understanding as possible of the current state of knowledge its limitations and its implications. Like all good research, applied research does not draw hard conclusions unless they are warranted by the data or well-founded theoretical insight. This issue of the ARI Newsletter provides some noteworthy examples of good applied research. Consider the article on simulation-focused training for aviation or the article on an experimental leadership development program. Each of these research efforts is designed to support decisions on important issues – issues, which even after the current research is completed, and decisions made, we may not completely understand.

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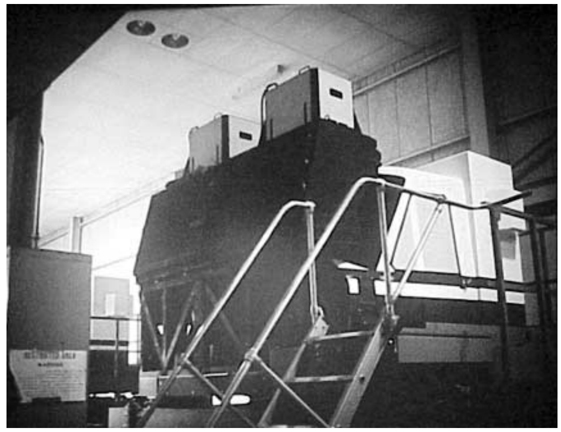
training class. All students are assigned to a class, which follows a fixed schedule. Students do not all learn the material and meet the training objectives at the same rate. Differential learning rates are handled by mechanisms such as the setback in which a student is reassigned to another class to repeat a portion of the curriculum. In this lock-step POI, a student who is learning rapidly is nonetheless required to stay with the curriculum. Students who have already met the training objectives continue to fly in order to meet the flight time requirement.

Proficiency-Based Training

Traditionally, training developers have considered simulators to be substitutes for aircraft. The goal of simulation technology was to reproduce as closely as possible the characteristics of the aircraft so that flight hours could simply be shifted from aircraft to simulator. This concept was based upon the time-honored notion of identical elements (Thorndike, 1903), and sought to maximize similarity between the location where training takes place (simulator) and where performance is demonstrated (aircraft). Simulator hours replaced aircraft hours, perpetuating the class-based training concept in which every student pilot received a pre-set number of hours of training.

This perception that training in the simulator is simply a substitute for training in the aircraft is changing. Research has demonstrated the advantages of simulation when combined with proficiency-based training. Dohme (1995) for example, using ARI's Training Research Simulator, demonstrated the effectiveness of proficiency-based simulator training for IERW student pilots. Instead of practicing each maneuver in the simulator for a pre-set number of hours, each student performed each flight maneuver until he or she mastered it. When the time came for the final checkride in the



The SFTS after being modified into the ARI Training Research Simulator

aircraft, simulator-trained students required fewer total repetitions in the aircraft to master the maneuvers. Although successful, Dohme's program of research did not result in the Army's class-based training system giving way to a proficiency-based system. However, more recent evidence shows that a well-designed training system based upon the use of simulation in conjunction with training to proficiency, can produce superior results than training in the aircraft alone.

One success story concerns the design of a simulation-focused training system for the U.S. Air Force's MH-53J Pave Low helicopter. Its development was driven by the increasing complexity of aircraft systems. With increasing upgrades to the aircraft, the number of flights needed to qualify increased. At the same time, flight hours were being reduced. Add to these considerations the high hourly operational costs for the MH-53J, and it became obvious that something had to be done.

The answer to this challenge was development of a training system founded upon proficiency-based training. Students were trained on part-task training devices until performance standards were met. Having done this, they were introduced to crew-level practice in a high fidelity, full mission simulator. The

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1993 curriculum was an approximate 50% mix of synthetic and aircraft training hours. The current curriculum, at this writing, is 24% aircraft and 76% synthetic-based. Before redesign of the program, it took 18 flights in the aircraft to qualify. After the change, only three flights were needed. This intervention was cost-effective, but how did this affect the quality of the product (i.e., the qualified Pave Low crew)? Pave Low commanders evaluated new crews trained in the simulator as superior to those trained only in the aircraft on all mission criteria except Night Vision Goggles ability, for which both were rated virtually the same. Furthermore, simulator-trained crewmembers took less time to be brought up to standard in the aircraft.

"The way in which U.S. Army Aviation trains will also have to change, and therein lies the challenge for ARI."

Future Directions in Army Aviation Training Research

U.S. Army Aviation's move toward simulation-focused, proficiency-based training, is a process requiring substantial change in the organizational culture, and thus cannot be accomplished quickly. Nonetheless, there are signs that ARI's efforts in this regard are beginning to show a modicum of success. The Army's current Flight School XXI initiative, which seeks to define the future simulation-based training system, has sparked a renewed interest in ARI's simulation research. Specific ARI-initiated issues like training iterations to proficiency replacing training hours have resurfaced. The results of the ARI low-cost simulation studies have been incorporated by the Directorate of Training Doctrine and Simulation (DOTDS) into the planning process for the development of a simulation-based training program for Flight School XXI. Similarly, DOTDS is closely following the ongoing ARI research effort on IERW instrument training. Preliminary results seem to indicate that the low-cost TH-67 simulator is at least as effective an instrument trainer as the expensive SFTS.

As Flight School XXI planning continues, it would be reasonable to expect ARI's consultative and research support role to increase. For example, ARI RWARU plans to investigate the use of motion cueing systems for IERW instrument training. This is an area where there have been lingering questions but few definitive answers based on research.

In conclusion, it seems that ARI has an excellent opportunity to provide critical guidance on how the Army will employ simulation in its future flight training systems.

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Dohme, J.A. (1995). The military quest for flight training effectiveness. In Larsen, W.E., Randle, R.J., & Popish, L.N. (Eds.) *Vertical Flight Training.* NASA Reference Publication 1373 (DOT/FAA/CT-94/83). Moffett Field, CA: National Aeronautics and Space Administration Thorndike, E.L. (1903). *Educational psychology.* New York: Lemcke and Buechner.

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Experimental Leadership Development Program

Testing an Experimental Leader Development Program

What would it take to make leader training effective and sustainable? How would we know it was effective? Evidence from years of research demonstrates that certain leadership styles can have a positive impact on unit cohesion, satisfaction, and performance. Exactly how leader should be trained and how their performance should be evaluated has not yet been established. The U.S. Army Research Institute, Leader Development Research Unit, at Fort Leavenworth, Kansas, is currently tackling the critical questions related to developing adaptive and self-aware leaders, capable of commanding an innovative and complex Army of soldiers.

To answer these questions, the Experimental Leadership Development Program (ELDP) is being conducted in collaboration with the Center for Leadership Studies (CLS), at the State University of New York at Binghamton, NY. In addition, it is supported by the U.S. Army Command and General Staff College at Fort Leavenworth. The Army will implement training based on the Full Range Model of Leadership, and determine the program's impact. The purposes of this research include: examining the impact and sustained effects of leadership training at CGSOC on enhancing leadership style and effectiveness; linking leader development to a well-validated leadership model, method and to Army doctrine (FM 22-100); and testing a leader development process that integrates education, experience and self-development.

The Pilot Program of Instruction

The pilot phase of a program of instruction has just been completed with 30 majors at CGSC. The focus throughout the 27-hour program of instruction is on individual and group learning using peer learning modalities and a four step Leadership Development Cycle. The foundation of this cycle is the Full Range Leadership model to move students from: **Awareness** of their personal leadership style through self-reflection and individualized feedback; to **Application** of their personal style to the Full Range Leadership model; to **Adoption** of new behaviors and beliefs leading toward more effective leadership styles in accordance with the model, and ultimately to higher levels of awareness and **Achievement**.

The students completed instruments to assess and exercises to provide a framework for thinking about their own leadership beliefs and practices.

These methods and measures are meant to be the basis for continued self-development. The students will have continued access to a virtual peer learning center and an e-coach. Training boosters are planned, using web-based technology designed for the project, to aid in sustaining the program's impact. ARI intends to track and assess the pilot group as well as two other cohorts for 1-2 years.

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Methods and Measures Used in Pilot Program

- On-line 360° multi-rater leadership assessment (MLQ)
- Leader Self-concept Measure
- Leader Development Action Plan
- Videotape of personal leadership vision
- Virtual peer learning center
- Coach (retired colonel sat in on each class)
- Video clips from movies to demonstrate various leader behaviors
- Journal keeping of observed leader behaviors

Experimental Leadership Development Program

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Upcoming milestones and actions steps

Plans are currently under way for an intensive 3-day training of ELDP instructors in November of 2001. The course will be taught again in the Spring of 2002 (term 2 and 3). Students will have access to an E-coach and peer learning groups for 12 months following graduation. Students will complete the 360° Multi-factor Leadership Questionnaire while they are a student, a second time after they have been serving in their next assignment for about one month, a third time after six months on the job, and a fourth time after at least 10 months on the job. Additional measures of leader effectiveness, such as command climate and unit readiness indicators from the units where these officers are assigned, will also be obtained.

"The pilot study helped to highlight what the students believe is most and least valuable and also to work out some of the logistical and technological difficulties. The real question lies in the evaluation of leader effectiveness and whether the program has a sustainable impact on individual and unit performance."

The pilot study helped to highlight what the students believe is most and least valuable and also to work out some of the logistical and technological difficulties. The real question lies in the evaluation of leader effectiveness and the program's impact on both individual and the unit performance. This question will be addressed as the data analysis begins and the full experimental trial occurs in the Spring of 2002.

For more information, the ARI POC on this project is Dr. Angela Karrasch, Leader Development Research Unit, Fort Leavenworth, Kansas. DSN 552-9767, Commercial (913)-684-9767 Email: karrasca@leavenworth.army.mil.

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Leader Development Research: A Longitudinal Perspective

BOLDS is a unique longitudinal database for studying leader development among Army officers.

Developing effective leaders is a perennial concern of the U.S. Army. Though difficult to quantify, the influence of leaders on unit success is substantial. In the Objective Force, leaders will play an even more important role, operating in an environment of rapid global communications, technological innovation, increased uncertainty, and changing missions. The expanding range and complexity of modern missions requires Army leaders to be not only smart and technically proficient, but also psychologically flexible and adept at handling ambiguous and multidimensional sociocultural situations.

Project Inception

In support of the Army's commitment to leader development, in 1993 ARI and the U.S. Military Academy (USMA) embarked on a joint research program intended to fill a gap in the field of leadership studies. Though much research concerning leadership had been conducted, few studies examined the changes in individual leader performance and effectiveness over time. The premise of the program was that such longitudinal research was necessary to establish definitive information about leadership emergence and development. The specific objective of the research program was to build a longitudinal database that would enable researchers to:

"Though much research concerning leadership had been conducted, few studies examined the changes in individual leader performance and effectiveness over time."

- identify the cognitive, personality, and/or social factors that contribute to the development of good Army leaders,
- describe changes over time in the leadership performance of individuals, and
- identify experiences that contribute to leader development.

This cooperative research program focused on developing the Baseline Officer Longitudinal Data Set (BOLDS). This unique longitudinal database was intended to track officers starting from their developmental phase at the military academy and following them over their Army careers.

Data Collection

Beginning with the class of cadets entering USMA in 1994, data were collected on these individuals over the four years of their pre-commissioning education, using two methods. First, data that are routinely accumulated on cadets by USMA and stored for administrative purposes were retrieved from their archives. Second, cadets in the Class of 1998 (N=1143) actively participated in BOLDS throughout their four years at USMA by responding to a variety of primarily paper-and-pencil measures.

To minimize the effects of repeated measurements and to reduce the amount of participation time required from any particular cadets, a sampling scheme was devised by which only subsets of cadets participated each year. Hence, across their four years at West Point, cadets from the Class of '98 cohort participated intermittently in data collection efforts associated with BOLDS, meaning that no cadet has data available for each variable in the database.

Database: Predictor Measures

The predictor measures collected on cadets can be categorized into nine broad dimensions pertaining to leader development: cognitive abilities, complex problem-solving skills, tacit knowledge, temperament, motivation, leadership style, physical fitness,

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cognitive-emotional identity development, and measures of experience (e.g., extracurricular activities, sports participation, military training, duty positions held). Within these broad dimensions, more than 30 constructs were measured.

Database: Criterion Measures

The criterion measures included in BOLDS focus on cadets' military development while at USMA. The Leadership Evaluation and Developmental Ratings (LEADR) system at USMA is used to evaluate cadets' military leadership performance and to provide developmental feedback and guidance. In accordance with the LEADR system, cadets receive a leadership grade (the evaluative component) for each academic term (and summer detail), and they receive Cadet Performance Reports (CPRs), which offer developmental information.

The leadership grade is determined by calculating a weighted average of the grades assigned by various raters (e.g., a cadet's Tactical Officer and superiors in the cadet chain of command). In keeping with a forced distribution system, no more than 20% of the cadets graded by an individual can receive an A, no more than 40% can receive a B, and no more than 40% can receive a C.

CPRs are primarily completed by cadets - from superior, peer, and subordinate positions. With the CPR, cadets are rated on 12 leadership dimensions: namely, duty motivation, military bearing, teamwork, influencing others, consideration for others, professional ethics, planning and organizing, delegating, supervising, developing subordinates, decision-making, and oral and written communication. In addition, cadets are given an overall ranking that indicates whether their leader performance is in the upper 10%, upper 25%, middle 30%, lower 25%, or lower 10% of cadets in that particular duty position. Based on the contents of the peer and subordinate CPR's, cadets receive developmental counseling from their tactical officer.

Future of BOLDS[1]

At the present time, the BOLDS database includes data only from cadets in the class of 1998 while they were in attendance at West Point (i.e., from high school and background data to commissioning). However, we envision that subsequent phases of the research program will follow these leaders through later career periods and that the database will be expanded to include officers from commissioning sources other than USMA.

Plans are currently underway to carry out a follow-up study, targeted for execution in 2002-2003, after this study group has had four to five years of experience as Army officers. Data will also be collected on ROTC and OCS cohorts from the same year group (1998).

The essential research objective of BOLDS is to determine the factors that contribute to effective leader development and performance. An ancillary goal is to identify factors that can

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1 The name behind the BOLDS acronym has transitioned from "Baseline Officer Longitudinal Data Set" into the more intuitive "Baseline Officer Leader Development Study."

Leader Development Research: A Longitudinal Perspective

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predict career commitment and retention of officers. This on-going research builds and capitalizes upon what is currently the most extensive developmental database available on Army officers. Results will give the Army solid, empirically based strategies and policy guidelines to optimize Army leader development efforts for the Objective Force.

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Charles S. Gersoni *(on left)*

& Dr. Paul A. Gade

Congratulations to Dr. Paul Gade, Chief of the ARI Research and Advanced Concepts Office, who has been awarded the Charles S. Gersoni Military Psychologist Award by the Division of Military Psychology of the American Psychological Association.

ARI Products Ready for Implementation Now!

ARI has developed a portion of its website to provide products to the Army that are available for implementation now. These products address a broad range of topic areas, including training, train-up for the Individual Ready Reserve, leadership and leader development, and support for Army families. With the click of a button, Army leaders and trainers can obtain ARI products for direct application. The products include handbooks, tools, guidelines, and recommendations on what to do and how to do it (see Figure 1, below). **"ARI Products Ready for Implementation Now!"** can be accessed from *www.ari.army.mil*. POC Dr. Alma Steinberg, (703) 617-0364.

Figure 1. **ARI Products Ready for Implementation Now!**

www.ari.army.mil

TRAINING

- Combat Leaders' Guide
- Commander's Battle Staff Handbook
- Decision-making in Urban Operations
- Enhancing Unaided Night Vision
- Strategy to Identify Tank Crews Requiring Remediation in Order to Qualify on Tank Table VIII
- Tool to Predict Qualification in Rifle Marksmanship
- Training for Night Operations
- Using Your Training Device to Predict Live Fire
- Utilizing the Structured Training Approach

TRAIN-UP FOR THE INDIVIDUAL READY RESERVE (IRR)

- Facilitating Reacquisition of Skills for Rapid Train-up
- Identifying MOSs for Rapid Train-up
- Predicting Skill Decay
- Skill Decay of Individual Ready Reserve (IRR) Soldiers Called Up for Desert Storm

LEADERSHIP AND LEADER DEVELOPMENT

- Addressing Soldier Concerns
- An Aid to Improve Understanding of Different Cultures
- Guidelines for Improving Decision Making
- Identifying and Addressing the Concerns of Individual Ready Reserve (IRR) Soldiers Called Up for Deployment
- Leaders' Guide for Contingency Operations

SUPPORT FOR FAMILIES

- Facilitating Family Adaptation to the Stresses of Deployment
- Family Readiness Group (FRG) Leader's Handbook
- Providing Support for Families

Learning Digital Skills via Computer-Based Training

"How much can be presented in a block of instruction without overloading the learner?"

"Can individuals learn software on their own, if simply given the opportunity to work with it?"

These questions were the impetus for an experiment on training soldiers to learn to a prototype version of a map interface in the Army's dismounted soldier system, called the Land Warrior (LW), where the soldier has a wearable computer. It seemed reasonable to assume that the computer itself would be a very appropriate means of delivering training for this and similar digital systems. Yet there are many questions regarding the specifics of designing multi-media instruction. We focused on two: how much information to present and the extent of instructional guidance for procedural skills.

A central feature in many of the Army's tactical digital systems is a computerized map that displays the battlefield locations of units as well as tactical overlays. A unique feature of the LW system's digital map is that it must show individuals, down to individual squad members (e.g., Grenadier, A Team, 1st squad, 2d platoon, B Company), as well as units. To use the map, soldiers must know the means by which units and individuals are depicted.

"Challenges lie both in developing good problem-solving scenarios that require soldiers to apply their skills and in developing measurement procedures and techniques that account for the possibility of more than one approach to accomplishing a task."

The first phase of the instruction trained soldiers on individual and unit codes. The second phase trained them to use basic map functions. As the target population for the LW system encompasses all infantrymen within a company, we conducted the training with soldiers representative of an infantry rifle platoon. 168 soldiers from four infantry school courses participated: One Station Unit Training (OSUT), Basic Noncommissioned Officer Course (BNCOC), Advanced Noncommissioned Officer Course (ANCOC) and Infantry Officer Basic Course (IOBC).

Computer-based training is an efficient way to train many digital skills while allowing soldiers to progress at their own rate.

Training Variations

Both the code and map training phases compared what we called "High" and "Low" working memory demand conditions. Miller (1956), in his classic article, demonstrated that the number of meaningful chunks that can be retained in working memory is limited to seven (plus or minus two). We used this concept, in part, to distinguish between the High and Low Demand conditions. Blocks of instruction with typically more than seven chunks formed the High Demand condition. Consequently, much information was presented before soldiers had an opportunity to apply this information. Blocks of instruction with typically fewer than seven chunks formed the Low Demand condition. Admittedly, a chuck of information is not easily defined, and our application was a simplistic application of Miller's concept of working memory capacity, but it helped structure the training variations.

In the code phase, soldiers learned a special coding system we developed for identifying individuals and units displayed on the map, as such a scheme does not currently exist. This code combined the Army's standard weapon and unit graphic symbols with the battle roster (BR) numbering system. The number of chunks typically reflected the number of codes to be learned. For example, all soldiers had

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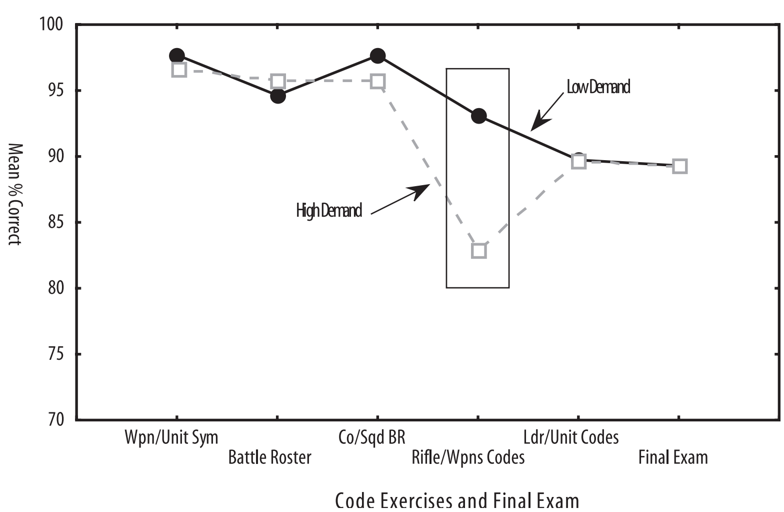
to learn the codes for the nine members of a rifle squad and the nine members of a weapons squad. In the Low condition, these were two separate blocks of instruction. In the High condition, these codes were combined into one block of instruction. Exercises were given at the end of each block of instruction. Remedial instruction was provided for soldiers who did not meet the criterion of 80% on the exercises. There was a code final exam. The Low Demand condition had eight blocks of instruction (symbols, BR system, company BR, platoon/squad BR, rifle squad codes, weapons squad codes, leader codes, and unit codes). The High Demand trained the same information, but in the context of five blocks of instruction.

In the map phase, three ways of training seven map functions were compared. Again, Low and High Demand conditions were implemented. For the map functions, the number of chunks reflected the number of steps required to execute a function. Exercises required soldiers to interact with the simulated map. The Low Demand condition had four blocks of instruction (zoom/pan, find others, display others, determine range/azimuth). In the High Demand condition, the same information was contained in a single block of instruction. A third, Exploratory, condition was added. In this condition there was no formal training. Soldiers were simply informed of the seven map functions they were to learn through exploration on their own. There was no instruction on how these functions or the map interface worked. Soldiers were given 60 minutes to work with the map, but they determined when they were ready to progress to the map exam. There was no remedial instruction in the map training.

Figure 1. Code Results



Within each course, soldiers were randomly assigned to the training conditions. All the training was computer-based. There was no classroom instructor. Soldiers progressed at their own rate through the training program.

What Did We Find?

We were interested in knowing:

- Which training condition was better
- Which condition took the least time
- If soldiers in one course did better than soldiers in another

In both training phases, differences in favor of the Low Demand condition occurred for the instructional segments where the amount of information presented was the most discrepant between the High and Low conditions. This was the rifle and weapons squad code block(s) of instruction. With the map, this difference was ultimately reflected in performance on the Display exercises. In each instance, those soldiers in the Low Demand condition performed better.

On the map final exam, soldiers in the Exploratory condition had the lowest scores, with

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Learning Digital Skills via Computer-Based Training

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those in the Low Demand condition achieving the highest scores. In sum, the Low Demand condition was the most effective for code and map skills. Figures 1 and 2 illustrate these.

The most interesting finding regarding time was on map training. Soldiers in the Exploratory condition spent only 15 minutes working with the map on their own, while the soldiers in the Low and High conditions took 55 minutes to complete their training. Yet, the Exploratory soldiers took more time on the map final exam; 22 minutes versus 15 minutes for those in the High and Low conditions. Both the lower score and the longer time to complete the final exam were indications of lower proficiency.

Consistent differences in the soldier courses occurred in both experimental phases. Officers typically achieved the highest scores in the shortest amount of time. Infantry trainees in OSUT scored the lowest and took the most time.

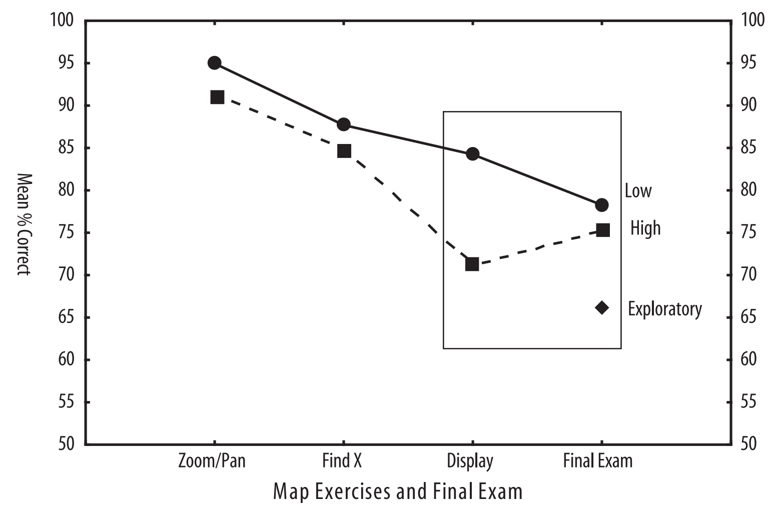
What Did We Learn?

Yes, you can include too much information in a block of instruction. The concept of the number seven can be used as a rough guide to determine when too much new information may be presented.

Exploratory learning may be fast, but not necessarily effective. However, given the relatively short time soldiers spent "exploring" the map interface, this type of training bears further investigation. Combining some elements of formal instruction with an exploratory mode might prove very effective in acquiring the interactive skills and insights required to work with digital interfaces.

Computer-based training is an efficient way to train many digital skills. Sizeable individual differences in rate of learning occurred for

Figure 2. Map Results



soldiers within each course as well as across courses. The computer-based training allowed soldiers to progress at their own rate, a particularly desirable feature when the target audience is heterogeneous.

The experiments showed how the training could be designed to incorporate the tactical system software as background instruction and demonstration screens, and as interactive screens for performance exercises. High-fidelity training is a positive by-product of this technique.

However, multi-media instruction is not an automatic panacea for training digital skills. Challenges lie both in developing good problem-solving scenarios that require soldiers to apply their skills and in developing measurement procedures and techniques that account for the possibility of more than one approach to accomplishing a task.

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DID YOU KNOW

Commitment to Service[1]

	Percent Agree/Strongly Agree[2]			
	Junior Enlisted (PV2-CPL/SPC)	Junior NCOs (SGT-SSG)	Senior NCOs (SFC-CSM)	Total Enlisted Personnel
Sampling Error	*+2*	*+3*	*+2*	*+1*
I would be disappointed in myself if I did not complete my service obligation.	64.7%	68.6%	75.8%	67.6%
The military has a great deal of personal meaning for me.	37.4%	58.3%	75.7%	49.8%
In my unit, leaders try to help soldiers stay in the Army even when they have trouble meeting standards.	46.0%	49.9%	54.3%	48.5%
The people most important to me would be disappointed in a soldier who dropped out of the Army before completing his/her obligation.	46.7%	43.5%	46.4%	45.6%
The members of my unit would look down on soldiers who leave the Army before completing their obligation.	48.0%	41.1%	38.0%	44.3%
I am afraid of what might happen if I quit the military without having another job lined up.	41.2%	47.2%	43.3%	43.5%
I feel a strong sense of belonging to the military.	28.1%	45.1%	65.4%	39.0%
I feel like "part of the family" in the military.	30.9%	38.3%	56.5%	36.9%
Too much of my life would be interrupted if I decided I wanted to leave the military now.	26.4%	35.7%	41.2%	31.6%
So far, the Army has lived up to the promises *it made to me* when I entered the service.	25.0%	34.6%	42.9%	30.7%
It would be too costly for me to leave the military in the near future.	24.6%	35.1%	38.4%	30.2%
I feel "emotionally attached" to the military.	17.9%	34.8%	48.4%	27.9%
One of the problems of leaving the military would be the lack of available alternatives.	26.0%	26.0%	23.8%	25.8%

1 *Fall 2000 Sample Survey of Military Personnel* (responses from 5,473 enlisted soldiers, PV2-CSM).

2 A 5 point agree/disagree scale was used.

Unit Climate[1]

	Percent Agree/Strongly Agree[2]			
	Junior Enlisted (PV2-CPL/SPC)	Junior NCOs (SGT-SSG)	Senior NCOs (SFC-CSM)	Total Enlisted Personnel
Sampling Error	*+2*	*+3*	*+3*	*+1*
It is easy for soldiers in this unit to see the 1SG about a problem.	64.5%	75.1%	85.3%	70.8%
It is easy for soldiers in this unit to see the CO about a problem.	55.2%	69.6%	82.5%	63.8%
My immediate supervisor sets the right example by his/her off-duty behavior and actions.	52.9%	64.6%	73.6%	59.6%
In terms of work habits and on-the-job behavior, my immediate supervisor sets the right example by his/her actions.	54.4%	62.0%	71.3%	59.3%
I receive the training needed to perform my job well.	52.7%	53.9%	60.4%	54.2%
Members in my work unit work well together as a team.	49.1%	53.8%	66.4%	53.0%
I receive the counseling and coaching needed to advance in my career.	50.0%	49.4%	53.7%	50.4%

1 *Fall 2000 Sample Survey of Military Personnel* (responses from 5,473 enlisted soldiers, PV2-CSM).

2 A 5 point agree/disagree scale was used.

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